

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-79 (Cancelled)

80 (Previously presented): A method for identifying a compound that modulates an HSP- α 2M receptor-mediated process, comprising:

- (a) contacting a test compound with: (i) a ligand-binding fragment of an α 2M receptor; and (ii) a purified heat shock protein, or a binding fragment thereof, or a purified HSP-peptide complex; and
- (b) measuring the level of HSP binding activity, HSP uptake activity, or HSP-mediated antigen representation activity,

such that if the level of HSP binding activity, HSP uptake activity, or HSP-mediated antigen representation activity measured in (b) differs from the level of HSP binding activity, HSP uptake activity, or HSP-mediated antigen representation activity in the absence of the test compound, then a compound that modulates an HSP- α 2M receptor-mediated process is identified.

81 (Previously presented): The method of claim 80 wherein the ligand-binding fragment of the α 2M receptor is immobilized to a solid surface.

82 (Cancelled)

83 (Previously presented): The method of claim 80 wherein the compound identified is an antagonist that interferes with an HSP- α 2M receptor-mediated process.

84 (Previously presented): The method of claim 80 wherein the HSP- α 2M receptor-mediated process affects diabetes or other autoimmune disorder, a disease or disorder involving disruption of antigen presentation or endocytosis, a disease or disorder involving cytokine clearance or inflammation, a proliferative disorder, a viral disorder or other infectious disease, hypercholesterolemia, Alzheimer's disease, or osteoporosis.

85 (Withdrawn): The method of claim 80 wherein the test compound is an antibody specific for the α 2M receptor.

86 (Withdrawn): The method of claim 80 wherein the test compound is an antibody specific for α 2M.

87 (Withdrawn): The method of claim 80 wherein the test compound is an antibody specific for a heat shock protein.

88 (Currently amended): The method of claim 80 or 93 wherein the ligand-binding fragment of the α 2M receptor comprises at least one complement repeat.

89 (Withdrawn): The method of claim 80 wherein the test compound is a peptide.

90 (Withdrawn): The method of claim 89 wherein the peptide comprises at least 5 consecutive amino acids of α 2M (SEQ ID NO.: 4).

91 (Withdrawn): The method of claim 89 wherein the peptide comprises at least 5 consecutive amino acids of a heat shock protein sequence.

92 (Withdrawn): The method of claim 89 wherein the peptide comprises at least 5 consecutive amino acids of the α 2M receptor (SEQ ID NO.: 7).

93 (Cancelled)

94 (Currently amended): The method of claim 80 or 93 wherein the activity measured is HSP binding activity.

95 (Previously presented): The method of claim 94 wherein the heat shock protein is labeled and the amount of bound heat shock protein is measured by detecting the label.

96 (Previously presented): The method of claim 94 wherein measuring the level of HSP binding activity of step (b) comprises measuring the amount of heat shock protein, or binding fragment thereof, bound to the ligand-binding fragment of the α 2M receptor, such that if the amount of bound heat shock protein measured in (b) differs from the amount of bound heat shock protein measured in the absence of the test compound, then a compound that modulates the binding of an HSP to the α 2M receptor is identified.

97-103 (Cancelled)

104 (Currently amended): The method of claim 80 or 93 wherein the ligand-binding fragment of the α 2M receptor is purified.

105 (Currently amended): The method of claim 80 or 93 wherein HSP uptake activity is measured.

106 (Currently amended): The method of claim 80 or 93 wherein HSP-mediated antigen representation activity is measured.

107 (Cancelled)

108 (Currently amended): The method of claim 107 or 88 wherein at least one complement repeat is selected from the group consisting of CR3 to CR10.

109 (Currently amended): The method of claim 80 or 93 wherein the ligand-binding fragment of the α 2M receptor comprises a cluster of complement repeats.

110 (Currently amended): The method of claim 80 or 93 wherein the cluster of complement repeats comprises the CI-CII complement repeat cluster of the α 2M receptor.

111 (Currently amended): The method of claim 80 or 93 wherein the ligand-binding fragment of the α 2M receptor comprises the p80 fragment of the α 2M receptor.

112 (Currently amended): The method of claim 80 or 93 wherein the ligand-binding fragment of the α 2M receptor is a peptide consisting of amino acids selected from the group consisting of the following amino acids of the human α 2M receptor: 25-68 (SEQ ID NO:20), 25-110 (SEQ ID NO:21), 68-110 (SEQ ID NO:22), 853-894 (SEQ ID NO:23), 853-934 (SEQ ID NO:24), 853-974 (SEQ ID NO:25), 853-1013 (SEQ ID NO:26), 853-1060 (SEQ ID NO:27), 853-1102 (SEQ ID NO:28), 853-1183 (SEQ ID NO:29), 895-934 (SEQ ID NO:30), 895-974 (SEQ ID NO:31), 895-1013 (SEQ ID NO:32), 895-1060 (SEQ ID NO:33), 895-1102 (SEQ ID NO:34), 895-1183 (SEQ ID NO:35), 935-974 (SEQ ID NO:36), 935-1013 (SEQ ID NO:37), 935-1060 (SEQ ID NO:38), 935-1102 (SEQ ID NO:39), 935-1183 (SEQ ID NO:40), 975-1013 (SEQ ID NO:41), 975-1060 (SEQ ID NO:42), 975-1143 (SEQ ID NO:43), 975-1183 (SEQ ID NO:44), 1014-1060 (SEQ ID NO:45), 1014-1102 (SEQ ID NO:46), 1014-1183 (SEQ ID NO:47), 1061-1102 (SEQ ID NO:48), 1061-1143 (SEQ ID NO:49), 1061-1183 (SEQ ID NO:50), 1103-1143 (SEQ ID NO:51), 1103-1183 (SEQ ID NO:52), and 1144-1183 (SEQ ID NO:53).